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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/540,674

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Petrus Henricus Notten

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05/13/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

SCULLY, STEVEN M

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

05/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/540,674 | NOTTEN ET AL. | |
| | Examiner | Art Unit | |
| | Steven Scully | 1795 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/3/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1795

**ELECTROCHEMICAL ENERGY SOURCE INTEGRALLY FORMED INTO A NON-
CONDUCTIVE CASING AND METHOD OF MANUFACTURING SUCH AN
ELECTROCHEMICAL ENERGY SOURCE**

Examiner: Scully S.N.: 10/540,674 Art Unit: 1795 May 5, 2009

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-6, in the reply filed on March 10, 2009 is acknowledged. The traversal is on the ground(s) that there is no serious burden. This is not found persuasive because the restriction is based on the lack of a special technical feature. Further, regardless of search method, inventions of different limitations will require different search strategies, and the time to consider the relevancy of collective references would increase proportionally as well.

 The requirement is still deemed proper and is therefore made FINAL. Therefore, claims 7-10 are withdrawn from consideration. Accordingly, claims 1-6 are pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Firstly, claim 1 states that "the electrochemical energy source has a *curved, planar* geometry." By definition, a planar geometry is a flat

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two-dimensional shape. It is unclear what applicant regards as the invention, and for the purposes of compact prosecution it is taken that the electrochemical energy source is curved. Secondly, claim 2 states "the lamination has a *curved shape* such that the lamination is *situated in one plane*." Much the same, it is taken that the lamination is curved for the purposes of compact prosecution. Thirdly, claim 5 states "a conventional battery." There are many different types of battery and it is unclear what applicant is intending to claim. For the purposes of compact prosecution it is interpreted that the limitation does not limit beyond the definition of a battery.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coustier (WO01/82393) in view of ESq. (US2003/0044678).

With respect to claim 1, Coustier discloses an electrochemical cell comprising a cell container having at least one curved surface, a negative electrode provided within the cell container, a separator provided within the cell container, and a positive electrode provided within the cell container. See claim 1. Further, an electrolyte is provided within the cell container. See claim 5. Coustier does not disclose using a portion of an electronic device's casing as the casing of an incorporated battery. ESq. discloses that batteries have three key design parameters for portable devices; weight, size and power. Reducing the size of an electronic device increases its portability. As the size of the portable device shrinks, so must the power source. See [0015]. ESq. recognizes that incorporating a battery into a portion of the housing of an electronic device reduces the size of the device. See [0016]. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a portion of an electronic device's casing directly as the casing of an incorporated battery, such as of Coustier, to reduce the size of the electronic device.

With respect to claim 2, Coustier discloses a jellyroll design having laminated electrodes with a curved shape. See Figure 2B.

With respect to claim 3, Coustier discloses using a liquid electrolyte. See page 19, lines 19-21.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coustier (WO01/82393) and ESq. (US2003/0044678) as applied to claims 1-3 above, and further in view of Ovshinsky et al. (US5,558,950).

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With respect to claim 4, Coustier and ESq. do not explicitly disclose a plurality of electrochemical cells electrically coupled together with insulation means. Ovshinsky et al. disclose a battery pack having a plurality of batteries connected in series. See Figure 10. It is well known to electrically couple batteries in series, as well as parallel, so as to increase the current and/or voltage. It would have been obvious to one of ordinary skill in the art at the time of the invention to electrically couple a plurality of electrochemical cells because it increases current and/or voltage output. Further, Ovshinsky discloses thermal conduction plates (14) between the cells to prevent the adjacent cells from touching each other as well as to permit dissipation of heat. See, for example, column 5, lines 29-41. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide insulation between the cells of Coustier because Ovshinsky et al. teach it prevents short circuiting as well as to assist in heat dissipation.

With respect to claim 5, Coustier discloses a battery comprising an anode, a cathode, a separator and an electrolyte. See claim 1.

With respect to claim 6, Coustier does not disclose a plurality of batteries electrically coupled. However, as discussed above with respect to claim 4, it would have been obvious to electrically couple a plurality of batteries in series and/or parallel to increase current and/or voltage. A unit cell is considered an electrochemical cell, thus a stack of unit cells electrically coupled is equivalent to a pack of batteries.

Contact/Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Scully whose telephone number is (571)270-5267. The examiner can normally be reached on Monday to Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571)272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. S./
Examiner, Art Unit 1795

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795